| Ref<br># | Hits | Search Query  | DBs                          | Default<br>Operator | Plurals | Time Stamp       |
|----------|------|---|------------------------------|---------------------|---------|------------------|
| L1       | 1    | "6789029"   | US-PGPUB;<br>USPAT           | OR                  | ON      | 2005/01/26 13:57 |
| L2       | 17   | ("5387253"   "5400644"   "5481914"   "5515720"   "5576976"   "5600064"   "5604309"   "5608351"   "5672949"   "5703292"   "5841025"   "6311555"   "6386032"   "6456939"   "6494093"   "6508122"   "6651027").PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR                  | ON      | 2005/01/26 13:58 |
| L3       | 487  | 702/76,77.ccls.   | US-PGPUB;<br>USPAT           | OR                  | ON      | 2005/01/26 14:07 |
| L4       | 679  | 73/503.3,504.02,504.04,504.12. ccls.  | US-PGPUB;<br>USPAT           | OR                  | ON      | 2005/01/26 14:07 |
| L5       | 726  | 331/1r,19,44.ccls.  | US-PGPUB;<br>USPAT           | OR                  | ON      | 2005/01/26 14:07 |
| L6       | 1889 | 3 or 4 or 5   | US-PGPUB;<br>USPAT           | OR                  | ON      | 2005/01/26 14:07 |

| Ref<br># | Hits | Search Query  | DBs                | Default<br>Operator | Plurals | Time Stamp       |
|----------|------|---|--------------------|---------------------|---------|------------------|
| L1       | 0    | "20040078159.did"   | US-PGPUB;<br>USPAT | OR                  | ON      | 2005/01/26 10:36 |
| L2       | 1    | "20040078159".did.  | US-PGPUB;<br>USPAT | OR                  | ON      | 2005/01/26 10:38 |
| L3       | 6    | ("6590460" "5889193" "6205838"<br> "6556929" "6462566" "6324910"<br>).PN. | US-PGPUB;<br>USPAT | OR                  | ON      | 2005/01/26 10:42 |
| L4       | 1    | 1 or "6789029".did. ´   | US-PGPUB;<br>USPAT | OR                  | ON      | 2005/01/26 10:42 |
| L5       | 1    | 1 or "6789029".pn.  | US-PGPUB;<br>USPAT | OR                  | ON      | 2005/01/26 10:42 |
| L6       | 2    | 2 or "6789029".pn.  | US-PGPUB;<br>USPAT | OR                  | ON      | 2005/01/26 10:42 |
| L7       | 0    | ("2004/0078159").URPN.  | USPAT              | OR                  | ON      | 2005/01/26 10:42 |
| L8       | 0    | ("6789029").URPN.   | USPAT              | OR                  | ON      | 2005/01/26 10:42 |

| Ref Hits | Search Query   | DBs                | Default<br>Operator | Plurals | Time Stamp       |
|----------|--|--------------------|---------------------|---------|------------------|
| L1 50    | ("5922954" "5361036" "5400269" "5444641" "5459432" "5487015" "5491725" "5576976" "4339959" "4471533" "4887081" "4945764" "4993274" "5239363" "5311538" "5465620" "6128954" "3882731" "3826575" "4010549" "4011440" "4258579" "4269073" "4270387" "4277173" "4280188" "428050" "4326428" "4382234" "4384409" "4408882" "4420259" "4422762" "4430616" "4443952" "4445377" "4450407" "4452092" "4456376" "4459759" "4461996" "4467984" "4473297" "4472884" "4484284" "4498340" "4517565" "4522496" "4524357" "4525672").pn. | US-PGPUB;<br>USPAT | OR                  | ON      | 2005/01/26 15:32 |

#### 10691306\_CLS.txt Most Frequently Occurring Classifications of Patents Returned From A Search of 10691306 on January 26, 2005

```
Original Classifications
         324/304
340/995.28
         356/473
           33/304
           73/497
          73/504.12
74/5.46
         356/464
702/190
Cross-Reference Classifications
         33/312
73/178R
73/504.02
324/300
33/321
33/356
    33322222222222
           73/504.06
           73/504.12
           74/5.6E
         137/804
329/3<u>5</u>6
                                                       2
         331/17
                                                                                           "
         331/27
340/988
                                                                                            12
         701/220
Combined Classifications

4 73/504.12

4 340/995.28

3 33/312

3 73/178R
                                                                                          -537 tcm
   3333333222222222222222222222
           73/504.02
         73/504.06
324/300
324/304
356/473
           33/302
33/304
           33/318
           33/321
                                                                           4
                                                                                            20
         33/356
73/497
73/504.11
•74/5.46
74/5.6E
           74/5.7
           74/5F
         137/804
         329/356
331/10
         331/17
         331/27
         340/988
         356/464
         372/94
701/220
         702/141
```

Page 1

# 10691306\_CLSTITLES.txt Titles of Most Frequently Occurring Classifications of Patents Returned From A Search of 10691306 on January 26, 2005

```
(2 OR, 2 XR)
    73/504.12
                  073 : MEASURING AND TESTING
         Class
         73/488
                         SPEED, VELOCITY, OR ACCELERATION
         73/504.02
                          .Angular rate using gyroscopic or Coriolis
                              effect
         73/504.12
                          ..Vibratory mass
                   (3 OR, 1 XR)
340 : COMMUNICATIONS: ELECTRICAL
  340/995.28
                  340 :
         Class
         340/988
                         VEHICLE POSITION INDICATION
         340/995.1
                          .Map display
                          ...Including particular position/direction
         340/995.28
                             sensor
                  (0 OR, 3 XR)
033 : GEOMETRICAL INSTRUMENTS
    33/312
         Class
                         INDICATOR OF DIRECTION OF FORCE TRAVERSING
         33/300
                               NATURAL MEDIA
         33/304
                          .Borehole direction or inclination
         33/312
                          .. Electrical telemetering to read-out
    73/178R
3
                    (0 \text{ OR}, 3 \text{ XR})
                  073 : MEASURING AND TESTING
         Class
         73/178R
                         NAVIGATION
    73/504.02
3
                    (0 \text{ OR}, 3 \text{ XR})
                  073 : MEASURING AND TESTING
         Class
                         SPEED, VELOCITY, OR ACCELERATION
.Angular rate using gyroscopic or Coriolis
         73/488
         73/504.02
                             effect
    73/504.06
                    (1 OR, 2 XR)
3
                  073 : MEASURING AND TESTING
         Class
                          SPEED, VELOCITY, OR ACCELERATION
         73/488
                          .Angular rate using gyroscopic or Coriolis
         73/504.02
                               effect
                          .. Fluid or fluent inertial mass (e.g.,
         73/504.05
                              electrons, ions, plasma)
         73/504.06
                          ...Fluid jet .
                  (0 OR, 3 XR)
324 : ELECTRICITY: MEASURING AND TESTING
         324/300
                         PARTICLE PRECESSION RESONANCE
                  (3 OR, 0 XR)
324 : ELECTRICITY: MEASURING AND TESTING
         Class
                          PARTICLE PRECESSION RESONANCE
         324/300
         324/304
                          .Using optical pumping or sensing device
                    (3 \text{ OR}, 0 \cdot XR)
  356/473
                  356: OPTICS: MEASURING AND TESTING
BY LIGHT INTERFERENCE (E.G., INTERFEROMETER)
.Rotation rate (e.g., ring laser gyros)
         Class
         356/450
         356/459
         356/472
                          ..Lock-in prevention
         356/473
                          ...Path length control (PLC)
                    (1 OR, 1 XR)
2
    33/302
                  033 : GEOMETRICAL INSTRUMENTS INDICATOR OF DIRECTION OF FORCE TRAVERSING
         Class
         33/300
```

|                | 33/301  |           | 10691306_CLSTITLES.txt NATURAL MEDIA .Process   |
|----------------|---|-----------|---|
|                | 33/302  |           | Borehole or tube interior study   |
| <sup>•</sup> 2 | 33/304<br>Class<br>33/300                                 | 033       | OR, 0 XR) : GEOMETRICAL INSTRUMENTS INDICATOR OF DIRECTION OF FORCE TRAVERSING NATURAL MEDIA  |
|                | 33/304  |           | .Borehole direction or inclination  |
| 2              | 33/318<br>Class<br>33/300                                 | (1<br>033 | OR, 1 XR) : GEOMETRICAL INSTRUMENTS INDICATOR OF DIRECTION OF FORCE TRAVERSING NATURAL MEDIA  |
|                | 33/318  |           | .Gyroscopically controlled or stabilized  |
| 2              | 33/321<br>Class<br>33/300<br>33/318                       | 033       | OR, 2 XR) : GEOMETRICAL INSTRUMENTS INDICATOR OF DIRECTION OF FORCE TRAVERSING NATURAL MEDIA .Gyroscopically controlled or stabilized |
|                | 33/321  |           | Plural gyroscopes (e.g., reference platform etc.)   |
| 2              | 33/356<br>Class<br>33/300                                 | (0<br>033 | OR, 2 XR) : GEOMETRICAL INSTRUMENTS INDICATOR OF DIRECTION OF FORCE TRAVERSING  |
|                | 33/355R<br>33/356   |           | NATURAL MEDIA .Magnetic field responsiveError indicator, preventor, or compensator  |
| 2              | 73/497<br>Class<br>73/488<br>73/497                       | (2<br>073 | OR, 0 XR) : MEASURING AND TESTING SPEED, VELOCITY, OR ACCELERATION .Temperature compensator   |
| 2              | 73/504.11<br>class<br>73/488<br>73/504.0                  | 073       | OR, 1 XR) : MEASURING AND TESTING SPEED, VELOCITY, OR ACCELERATION .Angular rate using gyroscopic or Coriolis effect                  |
|                | 73/504.0<br>73/504.1                                      |           |   |
| 2              | 74/5.46<br>Class<br>74/5R<br>74/5.4<br>74/5.41<br>74/5.46 | 074       | OR, 0 XR) : MACHINE ELEMENT OR MECHANISM GYROSCOPES .Gyroscope controlErectingBy magnetic field                                       |
| 2              | 74/5.6E<br>Class<br>74/5R<br>74/5.6R<br>74/5.6E           | 074       | OR, 2 XR) : MACHINE ELEMENT OR MECHANISM GYROSCOPES .with pick offElectrical and magnetic   |
| 2              | 74/5.7<br>Class<br>74/5R<br>74/5.7                        | 074       | OR, 1 XR) : MACHINE ELEMENT OR MECHANISM GYROSCOPES .With rotor drive   |
|                |   |           |   |

2 74/5F (1 OR, 1 XR)

```
10691306_CLSTITLES.txt
         class
                  074 : MACHINE ELEMENT OR MECHANISM
         74/5R
                         GYROSCOPES
         74/5F
                         .Flexure hinges for gyros
                   (0 \text{ OR}, 2 \text{ XR})
2 137/804
                  137 : FLUID HANDLING
         Class
                         FLOW AFFECTED BY FLUID CONTACT, ENERGY FIELD OR
         137/803
                             COANDA EFFECT (E.G., PURE FLUID DEVICE OR SYSTEM)
                         .Responsive to condition external of system
         137/804
2 329/356
                   (0 \text{ OR}, 2 \text{ XR})
                  329 : DEMODULATORS
         Class
         329/347
                         AMPLITUDE MODULATION DEMODULATOR
         329/356
                         .Suppressed carrier double sideband type
                   (1 OR, 1 XR)
31 : OSCILLATORS
  331/10
                  331:
         Class
                         AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
         331/1R
                             OR FREQUENCY SENSING MEANS
         331/10
                         .Plural A.F.S. for a single oscillator
                   (0 OR, 2 XR)
2 331/17
         class
                  331 : OSCILLATORS
                         AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
         331/1R
                              OR FREQUENCY SENSING MEANS
                         .Particular error voltage control (e.g.,
         331/17
                            intergrating network)
                   (0 OR, 2 XR)
  331/27
         class
                  331 : OSCILLATORS
                         AUTOMATIC FREQUENCY STABILIZATION USING A PHASE
         331/1R
                                OR FREQUENCY SENSING MEANS
                         .with reference oscillator or source
         331/18
                         ...Signal or phase comparator
...Plural active element (e.g., triodes)
         331/25
         331/27
   340/988
                   (0 \text{ OR}, 2 \text{ XR})
                  340 : COMMUNICATIONS: ELECTRICAL
         Class
         340/988
                         VEHICLE POSITION INDICATION
                   (2 OR, 0 XR)
  356/464
                  356 : OPTICS: MEASURING AND TESTING
         Class
                         BY LIGHT INTERFERENCE (E.G., INTERFEROMETER)
.Rotation rate (e.g., ring laser gyros)
..By fiber or waveguide interferometer (e.g.,
         356/450
         356/459
         356/460
                              Sagnac effect)
         356/464
                         ...Having null feedback loop
                  (1 OR, 1 XR)
372 : COHERENT LIGHT GENERATORS
2 372/94
         class
         372/92
                         PARTICULAR RESONANT CAVITY
         372/93
                         .Folded cavity
         372/94
                         ...Having a ring configuration
2 701/220
                   (0 \text{ OR}, 2 \text{ XR})
                  701 : DATA PROCESSING: VEHICLES, NAVIGATION, AND
         class
                           RELATIVE LOCATION
         701/200
                         NAVIGATION
                         .Employing position determining equipment
         701/207
                         ...Using inertial sensor
         701/220
  702/141
                   (1 OR, 1 XR)
                  702 : DATA PROCESSING: MEASURING, CALIBRATING, OR
         class
```

## 10691306\_CLSTITLES.txt

|         | I F 2   T N G      |
|---------|--------------------|
| 702/127 | MEASUREMENT SYSTEM |
| 702/141 | .Accelerometer     |
|         |                    |

|   | ·       |   |
|---|---------|---|
| 2 |         | (2 OR, 0 XR)  |
|   | Class   | 702 : DATA PROCESSING: MEASURING, CALIBRATING, OR TESTING                               |
|   | 702/127 | MEASUREMENT SYSTEM  |
|   |         |   |
|   | 702/189 | Measured signal processing  |
|   |         | .Medsured signar processing   |
|   | 702/190 | <pre>.Measured signal processingSignal extraction or separation (e.g., filtering)</pre> |
|   |         |   |

### 10691306\_LIST.txt

PLUS Search Results for S/N 10691306, Searched January 26, 2005

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

## 10691306\_QUAL.txt